

# EXECUTIVE SUMMARY

## ES.1 BACKGROUND AND PROJECT OVERVIEW

The Draft Environmental Impact Statement (EIS) and Draft Plan Amendment (PA) analyzes the impacts of enXco Development Corporation's (enXco or Applicant) Desert Harvest Solar Project (DHSP). In compliance with the National Environmental Policy Act (NEPA), the Bureau of Land Management (BLM) prepared this EIS to inform the public about the Proposed Action and to meet the needs of federal, state, and local permitting agencies in considering the project.

The application for this project was filed with the BLM for a right-of-way (ROW) authorization to construct, operate, maintain, and decommission a 1,208-acre, 150-megawatt (MW) solar energy project and 220-kilovolt (kV) generation-intertie transmission line (gen-tie line). The application also proposes to amend the California Desert Conservation Area (CDCA) Plan (BLM 1980), as amended (CDCA Plan) to find the site suitable for solar electricity generation and to allow a high-voltage transmission line outside of a federally designated utility corridor.

Because Riverside County has the authority to issue local permits for the proposed gen-tie line alternatives, this EIS has been prepared to a standard that complies with all requirements of the California Environmental Quality Act (CEQA) under Section 15221 of the CEQA Guidelines. CEQA Responsible Agencies and other readers interested in the CEQA compliance components of this EIS are directed to the CEQA Readers' Guide in Section 1.8.

The regional context for the proposed DHSP is shown in Figure 1-1 (see Appendix A for all figures). The Applicant proposes to construct, operate, maintain, and decommission the DHSP in Riverside County, California, near the unincorporated community of Desert Center. This Draft EIS and Draft Plan Amendment presents the potential effects of the Proposed Action and alternatives on BLM-administered lands and other affected lands and resources.

The proposed solar facility would consist of several components. A main generation area would include photovoltaic (PV) arrays, a switchyard, inverters, overhead lines, and access corridors. The solar facility would also include an operations and maintenance facility, an on-site substation and switchgear. Site security, fencing, and lighting will protect the facility.

The proposed 220-kV gen-tie line would transmit the electricity generated to the regional transmission system through the Red Bluff Substation, where the power from the proposed solar facility would be stepped up and fed into Southern California Edison's existing Devers Palo Verde No. 1 high-voltage transmission line.

For the solar facility and gen-tie line, the following action alternative configurations are considered in this EIS:

- Four solar project configurations – Proposed Solar Project, Solar Project Excluding the Palen-Ford Wildlife Habitat Management Area (WHMA), Reduced Footprint Solar Project, and High-Profile Reduced Footprint Solar Project; and
- Four gen-tie line configurations – Proposed Gen-Tie Line (Shared Towers), Separate Transmission Towers within Same ROW, Cross-Valley Alignment, and New Cross-Valley Alignment.

The solar facility alternatives would be located exclusively on BLM-administered land. The gen-tie alternatives would occur on a combination of BLM-administered land, land owned by the

Metropolitan Water District of Southern California, land owned by Riverside County, and private land.

## **ES.2 LEAD AND COOPERATING AGENCY ROLES AND RESPONSIBILITIES**

### **Bureau of Land Management**

The BLM is the Lead Agency under NEPA. As part of the Agency's responsibilities under Title V of the Federal Land Policy and Management Act (FLPMA; 43 U.S.C. 1761), the BLM must respond to the application for a ROW grant to construct, operate, maintain, and decommission a solar energy facility on public lands in compliance with FLPMA, BLM ROW regulations, and other applicable federal laws. The BLM will decide whether to approve, approve with modification, or deny issuance of a ROW grant to the Applicant for the DHSP. The BLM may include any terms, conditions, and stipulations it determines to be in the public interest, and may modify the proposed use or location of proposed facilities (43 CFR 2805.10(a)(1)). Because the BLM's decision is considered a federal action with the potential for significant environmental impacts, NEPA requires the preparation of an EIS to evaluate the impacts of the proposed action (granting the ROW as in the application), alternative actions, and no action. The BLM's decision also includes consideration of amending the CDCA Plan. If the BLM decides to approve the issuance of a ROW grant, the BLM will also amend the CDCA Plan as required.

### **County of Riverside**

The County of Riverside is the Lead Agency under CEQA and a Cooperating Agency under NEPA. Riverside County has discretionary authority to issue a Public Use Permit for any gen-tie line alternative, as each crosses private lands subject to County jurisdiction. Riverside County would also require the Applicant to obtain an encroachment permit, a franchise route agreement, and a unified program facility permit. Riverside County has actively engaged in EIS planning and reviewing documentation relating to the proposed project and alternatives. Pursuant to CEQA Guidelines Section 15221, the County of Riverside also intends to determine whether this EIS complies with the requirements of CEQA, and if so, to use this EIS to provide the environmental review required for its decision regarding the approval of a gen-tie action alternative under CEQA. Riverside County and BLM have signed a memorandum of understanding that defines their relationship and identifies the County as a Cooperating Agency.

### **National Park Service**

The National Park Service is a Cooperating Agency under NEPA. The National Park Service has actively engaged in EIS planning and reviewing documentation relating to the proposed project and alternatives. The National Park Service has no decision-making authority over the proposed project; however, the National Park Service has an interest in ensuring that the effects of development projects on National Parks are minimized. The National Park Service and BLM have signed a memorandum of understanding that defines their relationship and identifies the National Park Service as a Cooperating Agency.

## **ES.3 NATIVE AMERICAN GOVERNMENT TO GOVERNMENT CONSULTATION**

The BLM is responsible for consultation with Native American tribes for the purpose of identifying sacred sites and other places of traditional religious and cultural importance, and to incorporate appropriate mitigation measures in the event such sites are located during construction.

Consultation with tribes has been initiated and will continue throughout the NEPA and National Historic Preservation Act Section 106 compliance processes.

The BLM contacted the Native American Heritage Commission (NAHC) in October 2011 to obtain information on known cultural resources and traditional cultural properties and to learn of any concerns Native Americans may have about the DHSP. In addition, the BLM requested a list of Native Americans who have heritage ties to Riverside County and who want to be informed about new development projects in the county. The NAHC responded on October 5, 2011 with the information that the Sacred Lands File database did not indicate the presence of Native American cultural resources within the DHSP area of potential effects. The NAHC also forwarded a list of Native American groups or individuals interested in development projects in Riverside County. This list can be found in Appendix I.

The BLM has invited Indian Tribes to consult on the DHSP on a government-to-government basis at the earliest stages of project planning by letter on October 4, 2011 (Kalish 2011). The letter requested assistance in identifying any issues or concerns that a tribe might have about the project, including identifying places of religious and cultural significance that might be affected by the proposed project. The letter further requests that each Tribal Government identify those tribal representatives who have been designated to consult with the BLM on this project.

Since that time, the BLM has followed up with Tribal governments through additional correspondence, communication, and provision of other project information. Consultation with Indian Tribes on this project is ongoing.

The fifteen tribes consulted for the DHSP are: Agua Caliente Band of Cahuilla Indians, Augustine Band of Cahuilla Mission Indians, Cabazon Band of Mission Indians, Cahuilla Band of Mission Indians, Chemehuevi Indian Tribe, Cocopah Indian Tribe, Colorado River Indian Tribes, Fort Mojave Indian Tribe, Fort Yuma Quechan Indian Tribe, Morongo Band of Mission Indians, Ramona Band of Mission Indians, San Manuel Band of Mission Indians, Soboba Band of Luiseno Indians, Torres-Martinez Desert Cahuilla Indians, and the Twenty-Nine Palms Band of Mission Indians.

#### **ES.4 PUBLIC PARTICIPATION**

On October 3 and 6, 2011, scoping activities were conducted by the BLM in compliance with the requirements of NEPA for the DHSP. The BLM's scoping activities are described in detail in the Public Scoping Report, which is provided in Appendix B. The scoping report documents the Notice of Intent, the scoping meetings, workshops, and the comments received during scoping.

#### **ES.5 PURPOSE AND NEED**

In accordance with FLPMA (Section 103(c)), public lands are to be managed for multiple uses, and management must consider the long-term needs of future generations for renewable and non-renewable resources. The Secretary of the Interior is authorized to grant ROWs on public lands for systems of generation, transmission, and distribution of energy (Section 501(a)(4)). Given the BLM's multiple use mandate, the purpose and need for the Proposed Action is to respond to a FLPMA ROW application submitted by the Applicant to construct, operate, maintain, and decommission a solar energy-generating facility and associated infrastructure on BLM lands in compliance with FLPMA, BLM ROW regulations, and other applicable Federal laws and policies, including:

- Executive Order 13212, dated May 18, 2001. Mandates that agencies act expediently and in a manner consistent with applicable laws to increase the “production and transmission of energy in a safe and environmentally sound manner.”
- The Energy Policy Act 2005 (EPAct 05). Sets forth the “sense of Congress” that the Secretary of the Interior should seek to have approved non-hydropower renewable energy projects on the public lands with a generation capacity of at least 10,000 MW by 2015.
- Secretarial Order 3285A1, dated March 11, 2009, amended February 22, 2010. “Establishes the development of renewable energy as a priority for the Department of the Interior.”

## **ES.6 DECISIONS TO BE MADE (PLAN AMENDMENT)**

This document provides information to the authorized officer to decide whether the application area should remain undesignated or be designated as suitable or unsuitable for solar energy development. If the BLM designates the area as suitable for solar energy development, it would subsequently decide whether the proposed ROW grant would be issued as in the application, issued for a modified project, or denied. If the BLM decides to approve the issuance of a ROW grant, the BLM will also amend the CDCA Plan as required.

Similarly, the County of Riverside must respond to the applications submitted by enXco. In rendering a decision whether to approve the project and issue the necessary permits to construct and operate the DHSP, the County must determine whether the project is consistent with the policies of the Riverside County General Plan and conforms to applicable regulations and standards set forth in County ordinances. The County must also make findings pursuant to CEQA that the project’s impacts on the physical environment have been mitigated to the degree feasible.

### **Alternatives**

Alternatives were evaluated for inclusion in the EIS using appropriate screening criteria pursuant to NEPA and CEQA. The alternatives that respond to the purpose and need for the Proposed Action (see Section ES.2) and are otherwise reasonable (as described in Section 6.6.1 (Reasonable Alternatives) of the BLM NEPA Handbook (H-1790-1)) are fully analyzed in the EIS. As part of the alternatives screening process, 20 alternatives were evaluated, and 12 alternatives, including the proposed DHSP, were developed in this EIS, as follows (see Chapter 2 for complete descriptions of these alternatives):

- Alternative 1: No Action (No Plan Amendment)
- Alternative 2: No Project Alternative (with Plan Amendment to Find the Site Suitable for Solar and Available for Large Scale Solar Development )
- Alternative 3: No Project Alternative (with Plan Amendment to Find the Site Unsuitable and Not Available for Large Scale Solar Development)
- Alternative 4: Proposed Solar Project
- Alternative 5: Solar Project Excluding WHMA
- Alternative 6: Reduced Footprint Solar Project
- Alternative 7: High-Profile Reduced Footprint Solar Project
- Alternative A: No Gen-Tie

- Alternative B: Proposed Gen-Tie Line (Shared Towers)
- Alternative C: Separate Transmission Towers within Same ROW
- Alternative D: Cross-Valley Alignment of Gen-Tie Line
- Alternative E: New Cross-Valley Alignment

### **Comparison of Alternatives**

In order to have a complete project, the deciding official may choose one power plant alternative (Alternatives 1-7) and one gen-tie line alternative (Alternatives A-E). A comparison of alternatives is presented in Section 2.17 of this EIS.

### **Agency Preferred Alternative**

The BLM has selected Alternative 7, High-Profile Reduced Footprint Solar Project, with Alternative B, Proposed Gen-Tie Line (Shared Towers), as the agency-preferred alternative. Alternative 7 with Alternative B is the preferred alternative because it would be able to generate 150 MW of renewable energy on fewer acres than the proposed solar facility, thus reducing impacts resulting from ground disturbance. This alternative would also incorporate the use of shared facilities in an already designated transmission line ROW, minimizing cumulative impacts.

### **CEQA Environmentally Superior Alternative**

CEQA defines the environmentally superior alternative as having an overall environmental advantage compared to the other alternatives based on the impact analysis. As demonstrated in Section 2.17.3, the overall environmentally superior alternative is Alternative 1, No Action Alternative, with Alternative A, No Gen-Tie Alternative. The environmentally superior alternative among the remaining action alternatives is Alternative 6, Reduced Footprint Alternative, with Alternative B, Proposed Gen-Tie Line (Shared Towers). A complete analysis of how this conclusion was reached is presented in Section 2.17.

## **ES.7 CONNECTED/CUMULATIVE ACTIONS**

Connected actions are defined by the BLM Handbook H-1790-1 as those actions that are “closely related” and “should be discussed” in the same NEPA document (40 CFR 1508.25(a)(1)). There are no connected actions for this EIS.

Cumulative actions are defined by the BLM NEPA Handbook H-1790-1 as proposed actions which potentially have a cumulatively significant impact together with other proposed actions and “should be discussed” in the same NEPA document (40 CFR 1508.25(a)(2)). For this NEPA analysis, existing conditions are the physical environment as of September 2011 (the commencement of environmental analysis), which includes the adjacent project’s (Desert Sunlight Solar Farm) solar field partially constructed and its gen-tie line not yet constructed. Therefore the Desert Sunlight Solar Farm and gen-tie are foreseeable actions for the purposes of this analysis and are addressed as cumulative actions. There are a large number of renewable energy and other projects proposed in the region that were identified as potentially contributing to cumulative environmental impacts. These cumulative projects are discussed in detail in Section 4.1 of this EIS.

## ES.8 ENVIRONMENTAL CONSEQUENCES

### Unavoidable Adverse Effects

- **Air Quality.** Air pollutant emissions during construction would likely result in temporary and unavoidable adverse PM<sub>10</sub>, VOC, CO, and NO<sub>x</sub> impacts.
- **Vegetation Resources.** Temporary disturbance and permanent loss of vegetation and habitat, jurisdictional streambeds, sensitive communities, and special status plant species would occur on site. Dust and erosion related to construction would impact off-site plant species.
- **Wildlife Resources.** Temporary disturbance and permanent loss of wildlife habitat on site, displacement of wildlife off site, regional habitat fragmentation, and disturbances by dust, light, and noise of off-site habitat would result from project construction and operation. Operation and maintenance would further impact birds on site. The project would contribute to loss of special status species in the NECO planning area.
- **Lands and Realty.** The project would contribute to large scale of land use conversion (over 52,000 acres or 2.5 percent of the land along the I 10 corridor).
- **Noise.** The project would result in a substantial increase in traffic noise levels during construction and decommissioning along Kaiser Road north of Lake Tamarisk Road.
- **Recreation.** The project would be visible from wilderness areas in the Coxcomb Mountains during construction, operation, and decommissioning.
- **Visual Resources.** The project would create impacts from the conversion of a natural desert landscape to a landscape dominated by industrial character. Long-term land scarring would follow project decommissioning. The project would have strong visual contrast with the surrounding landscape and would be visible from proximate wilderness areas and scenic vistas. The project would not meet applicable Interim VRM Class III management objectives and would conflict with numerous Riverside County General Plan policies.

### CEQA Significant Impacts and Mitigation Measures

In compliance with Section 15123(b)(1) of the CEQA Guidelines, this section summarizes the proposed project's significant impacts and mitigation measures.

**Table ES-1. CEQA Significant Impacts and Mitigation**

Impact Area	Significance Criterion	Significant Unavoidable Impact	Description
Air Resources	AR-2	Construction emissions	Construction of the project would generate emissions of particulate matter (PM <sub>2.5</sub> and PM <sub>10</sub> ), VOC, CO, and NO <sub>x</sub> . Mitigation Measures AIR-1 through AIR-4 would limit these emissions to the extent possible, but residual impacts from PM <sub>10</sub> , VOC, CO, and NO <sub>x</sub> would persist after mitigation. Significant, unavoidable impacts would be temporary; these impacts would be limited to the duration of construction activities.

**Table ES-1. CEQA Significant Impacts and Mitigation**

Impact Area	Significance Criterion	Significant Unavoidable Impact	Description
Biology – Vegetation	VEG-1	Cumulative impacts to sensitive natural communities	Even with implementation of Mitigation Measures VEG-1 through VEG-10, the project would represent a considerable contribution to the cumulatively significant regional impacts to sensitive natural communities.
Biology – Vegetation	VEG-2	Cumulative impacts to jurisdictional streambeds	Even with implementation of Mitigation Measures VEG-1 through VEG-10, the project would represent a considerable contribution to the cumulatively significant regional impacts to state-jurisdictional streambeds.
Biology - Wildlife	WIL-1	Cumulative impacts to special-status species	Even with implementation of mitigation, the residual impacts of the project would represent a considerable contribution to cumulatively significant habitat loss for special-status wildlife species in the NECO planning area.
Biology - Wildlife	WIL-2	Cumulative impacts to wildlife movement	Even with implementation of mitigation, the residual impacts of the project would represent a considerable contribution to reduced wildlife movement and connectivity in the upper Chuckwalla Valley.
Cultural Resources	CR-1 and CR-2	Adverse change to historic and archaeological resources	The project would result in direct and indirect impacts during construction, operation, and decommissioning to cultural resources, including adverse change to the significance of historic and archaeological resources. Mitigation Measures MM CUL-1 through MM CUL-9 would reduce impacts by developing and implementing a Memorandum of Agreement and Historic Properties Treatment Plan, requiring monitoring and training for all construction personnel, and treating/curating inadvertent discoveries. However, some impacts, particularly to the setting of the North Chuckwalla Petroglyph District (CA-RIV-1383, NRHP-listed), may be significant and unavoidable under CEQA.
Noise and Vibration	NZ-4	Increase in noise levels along Kaiser Road	The project would result in a substantial increase in traffic noise levels during construction and decommissioning along Kaiser Road north of Lake Tamarisk Road. Mitigation Measure NOI-1 would limit construction activities to daylight hours; however, there would still be a significant unavoidable impact from project construction.
Visual Resources	V-1	Scenic vistas	Project would be prominently visible from elevated vantage points in the area, and the introduction of industrial character and structural visual contrast would result in significant unavoidable impacts to these scenic vistas.
Visual Resources	V-3	Degrade visual character of the landscape	Project would introduce a prominent built facility with considerable industrial character into an existing landscape presently absent such features, causing a substantial degradation of the existing visual character or quality of the site and its surrounding landscape when viewed from the elevated viewpoints in the wilderness areas.

**Table ES-1. CEQA Significant Impacts and Mitigation**

Impact Area	Significance Criterion	Significant Unavoidable Impact	Description
Visual Resources	V-5	Long-term inconsistency with established BLM VRM class objectives	The moderate to high degree of visual change that would be caused by the project (as viewed from I-10) would result in a long-term (greater than five years) inconsistency with the applicable Interim VRM Class III.
Visual Resources	V-6	Inconsistency with local policies	The moderate to high degree of visual change that would be caused by the proposed solar farm would not be consistent with the following Riverside County General Plan policies: LU 4.1, LU 13.1, LU 13.3, LU 13.5, LU 13.8, LU 20.1, LU 20.2, LU 20.4, DCAP 2.3, DCAP 9.1, and DCAP 10.1.
Visual Resources	V-7	Cumulative visual alteration	The presence of the project would substantially contribute to cumulative visual alteration. There are no mitigation measures available to reduce this impact.

### Areas of Controversy

Pursuant to 40 CFR 1502.12 and Section 15123(b)(2) of the CEQA Guidelines, this section summarizes the areas of known controversy surrounding the proposed project. Based on input received from agencies, organizations, Native Americans and Tribal Governments, and members of the general public during scoping EIS, several areas of controversy related to the DHSP emerged, including:

- Opposition to the placement of a large solar project on largely undisturbed desert land
- Concern for conflict with designated recreational and wilderness uses in the project area, including in Joshua Tree National Park
- Concern regarding the impacts of the project on biological and cultural resources
- Concern regarding groundwater use
- Concern regarding the range of alternatives considered
- Concern regarding the purpose of and need for the project

Extensive comments were received during the scoping process for the DHSP. The scoping process and public input received are provided in detail in Appendix B, Public Scoping Report.

### Issues to be Resolved

Pursuant to 40 CFR 1502.12 and Section 15123(b)(3) of the CEQA Guidelines, this section summarizes the major issues to be resolved in the Final EIS and the Record of Decision.

The choice among alternatives is a major issue to be resolved. BLM has the ultimate authority to approve or deny any of the solar facility and gen-tie alternatives; however, Riverside County has the authority to select a gen-tie alternative, and the County must adopt a Statement of Overriding Considerations pursuant to CEQA Section 15093 for any alternative that is approved that would



have significant unavoidable impacts. The two Lead Agencies must approve the same gen-tie alternative in order for the Applicant to construct any portion of the project.

Access to private land and land owned by Metropolitan Water District of Southern California was an obstacle to performing cultural and paleontological surveys on all gen-tie alternatives. However, at the time of this Draft EIS, field assessments are ongoing and results will be incorporated into the Final EIS.

Finally, the Lead Agencies must decide whether to adopt a mitigation measure for groundwater resources that would protect the Chuckwalla Valley Groundwater Basin from overdraft conditions attributed to the DHSP. Such a measure would also contribute to unavoidable adverse air quality effects and adverse effects on noise and traffic.